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ABSTRACT

This mimeographed compilation of research in agricultural education contains summaries of 15 studies reported during 1968-69 from five states of the Southern region. Included in the summaries of doctoral dissertations, master's theses, and staff studies are the title, purpose, method, and findings. Studies for the year 1967-68 are reported in April 1969 issue of "Research in Education" as ED 024 833. (SB)

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SUMMARIES OF RESEARCH STUDIES IN AGRICULTURAL EDUCATION

SOUTHERN REGION

1968-69

Louisiana State University and
Agricultural and Mechanical College
School of Vocational Education
Baton Rouge, Louisiana

Vo. Ag. Ed. No. 29

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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INTRODUCTION

This compilation of research in agricultural education includes summaries of 15 studies reported during 1968-69 from five states of the Southern Region.

Abstracts of studies completed in 1968-69 were reported by teacher education institutions and state departments of education in the region. All studies submitted are included in this report although some may not meet the criteria that were established for the selection of studies to be included in the division publication.

This compilation of Summaries of Research Studies in Agricultural Education is an activity of the Research Committee of the Agricultural Education Division of the American Vocational Association.

Charlie M. Curtis
Southern Region Representative
Research Committee
Agricultural Education Division
American Vocational Association

SUMMARIES OF STUDIES IN AGRICULTURAL EDUCATION
SOUTHERN REGION, 1968-69

AUTRY, JOSEPH WAYNE. The Academic Success of Transfer Students in the College of Agriculture at Texas A & M University. Ph.D. Dissertation, 1969. Texas A & M University. 97 p. Texas A & M University Library, College Station.

Purpose. The purpose of this study was to identify and translate data relative to transfer students in the College of Agriculture at Texas A & M University that would serve for effective counseling within the College of Agriculture, in transferring institutions, and in high schools.

Method. Relevant data were accumulated for 152 transfer students and 134 natives in the College of Agriculture who first enrolled in any college or university in the summer or fall of 1963. Statistical treatments of data included analysis of variance, analysis of covariance and chi-square where appropriate.

Findings. (1) The mean scholastic aptitude score for junior college transfers was significantly lower than that for natives, and the range of scores was greater. (2) The mean scholastic aptitude score and range of scores for transfer students were lower in agricultural education than in other areas. (3) The mean scholastic aptitude score and the range of scores of those transfer students from high school graduating classes of over 200 students were higher than those of intermediate size classes. (4) The mean grade point ratios achieved by junior college transfers, senior college transfers, and native students were comparable on comparable work. (5) Junior college transfers were less persistent than natives. (6) The mean grade point ratios of transfer students were comparable with those of natives within all curricular areas. (7) The mean grade point ratios achieved by transfer students among curricular areas were comparable. (8) The mean grade point ratio earned was significantly higher for those who transferred with more pre-transfer credit. (9) The mean grade point ratio achieved by transfer students from smaller high school graduating classes was significantly higher than those from larger classes. (10) Persistence of transfer students was not significantly related to the number of hours of pre-transfer credit, the size of high school graduating class, nor to range of scholastic aptitude.

BASS, B. C. Occupational Status in 1967 of Former Students of Vocational Agriculture in Virginia. Research Division Bulletin 39. May, 1969. 20 p. Virginia Polytechnic Institute, Blacksburg.

Purpose. The purpose was to determine the occupational status in 1967 of former students of vocational agriculture who left high schools in Virginia from 1954 through 1966.

Method. Data for the study were obtained from all available follow-up records kept by teachers of vocational agriculture. The records of 32,270 former students were included.

Findings. More than one-fourth (26.95 per cent) of all the former students gainfully employed (not including those in the armed forces) were farming or in related occupations in 1967 and 73.05 per cent were in non-agricultural occupations. However, more than one-third (35.11 per cent) of those who studied vocational agriculture four or more years were farming or in occupations related to farming in 1967.

Former students tend to farm in the communities in which they were educated.

Of the former students engaged in farming, 31.90 per cent either owned or were buying farms in 1967 or had definite partnership agreements with their respective fathers.

Thirty-two per cent of the former students who were farming in 1967 obtained most of their income from non-agricultural work.

Only fifty-four hundredths of one per cent of the former students were unemployed in 1967.

One-sixth (16.61 per cent) of the former students were in the armed forces in 1967.

CHEATWOOD, CHARNIA LOUIS, JR. Characteristics of Male Students Enrolled in Agricultural Curricula at Louisiana State University and Factors that Influenced Their Curricula Choices. Ph.D. Dissertation, 1969. Louisiana State University. 132 p. Baton Rouge

Purpose. The objectives of this research were to determine: (1) Background characteristics of farm and nonfarm students. (2) Factors and people that influence curricula choices. (3) Influences that cause students to change curricula after entering college. (4) Occupational and educational plans of agricultural students.

Method. The Descriptive Survey Method, with the Mail Questionnaire Technique, was used in this investigation. The 424 male respondents (137 freshmen, 178 sophomores and juniors, 109 seniors) represented 83 per cent of the students enrolled in agricultural curricula (except industrial technology and home economics) at Louisiana State University for the Fall Semester of 1968-69.

Statistical procedures included number and per cent distribution, and the chi-square and analysis of variance tests of significance. The null hypothesis was applied to each test of significance and was accepted or rejected at the 0.05 and 0.01 levels of significance.

Findings. Eighty-one per cent of the students graduated from Louisiana schools while 14 per cent were from other states. Five per cent were from outside the United States. Half of the Louisiana respondents were from six parishes.

Sixty per cent of the students had a nonfarm background and had graduated from a significantly larger school than the farm respondents. Farm participants enrolled in vocational agriculture in high school an average of 2.13 years in contrast to 0.38 years for the nonfarm participants.

Some characteristics of farm students were: over 90 per cent were less than 23 years old; 20.9 per cent were married; 0.6 per cent reported no parental encouragement for continued education; there were 3.4 siblings per student; and the fathers' mean annual gross income was \$9,100. Of the nonfarm students, 86.5 per cent were less than 23 years old; 18.3 per cent were married; 2.0 per cent indicated no parental encouragement for continued education; there were 3.2 siblings per student; and the fathers' mean annual gross income was \$9,630. No significant difference existed between farm and nonfarm students for the above characteristics.

Approximately two fifths of the farm participants and one third of the nonfarm youth had student jobs. Almost half of the employed farm youth had jobs concerned with their curricula while almost half of the employment of nonfarm youth was not related to agriculture.

Parental aid was the major source of finances during the freshman year; thereafter, support from parents decreased while student jobs and loans increased.

Nonfarm students were more conservative than farm students in rating curricula influences. Science and vocational agriculture were the most influential high school courses. More than half of the respondents were influenced in curricula choices by parents, other adults, employment experiences, and publications on agricultural careers and curricula.

Twenty-one per cent of the students were unsure of their curricula choices as freshmen. The major reason for curricula change was that "the first curriculum was not what I had expected." The 0.811 average number of curricula changes for nonfarm youth was significantly higher than the 0.487 average for farm youth. Thirty per cent of the upperclassmen began college in nonagricultural curricula.

Nonfarm participants were primarily enrolled in forestry and pre-veterinary medicine. A majority of the farm youth were enrolled in agricultural business, dairy science, animal science, and vocational agricultural education.

Most popular careers planned by upperclassmen were: (1) forestry and wildlife, and (2) farming. Freshmen listed these careers: (1) veterinarian, (2) forestry and wildlife, and (3) farming. Only 41 per cent of the seniors planned to work in Louisiana. Graduate study was planned by 57.6 per cent of the farm youth and 59.6 per cent of nonfarm youth.

Collins, Howard Allen. History of the Department of Vocational Agriculture at George Washington Carver Regional High School, Rapidan, Virginia, 1948-1968... Virginia State College, Petersburg.

Purpose. To record an historical chronology of the initiation, organization, development and termination of the program of vocational agriculture from 1946 through 1968.

Method. The pertinent literature pertaining to the department which had been filed was reviewed. Conferences were held with fifty former high school students, fifteen young farmers, twenty adult farmers, and ten former enrollees in the institutional-on-farm training program. Questions concerning current employment, economic status, self-appraisal of training received, and reactions to the closing of the department were asked.

Findings. On the basis of the analysis of the History of the Vocational Agriculture Department of the George Washington Carver Regional High School the data strongly suggest the following: (1) The department served a vital and functional role as a segment of the total instructional program at the George Washington Carver Regional High School. (2) The purposes and objectives of the department were aligned with the national goals of vocational education in agriculture. (3) The objectives that were set forth for the locale were adequately and sufficiently met in terms of the needs and aspirations of the people served. (4) The records that were kept on the department were substantial enough to provide the necessary information relative to the writing of this history. (5) The instructional discipline offering provided the latitude that increased the employability of the recipients of the program.

ELLIOTT, NATHANIEL. A Study of the General Mechanics Programs in Several Departments of Agricultural Education in Virginia. Virginia State College, Petersburg.

Purpose. To determine certain characteristics of the organization, nature of the offerings, physical facilities, instructional staff, instructional activities, and instructional materials in general mechanics in Virginia.

Method. A preliminary questionnaire was prepared and then evaluated by five teachers of general mechanics and the teacher-education staff. The resulting observations were incorporated into the final draft of the questionnaire. One hundred nine teachers were asked to complete the questionnaire and 81 teachers responded.

Findings. The principle findings in this investigation were as follows: (1) The program of general mechanics was started in 1955 and the number of new programs continued to increase until 1965; after which, there was a continuous decline in the number of programs initiated. (2) Fifty-five teachers permitted students to select the general mechanics curriculum freely, while thirty-nine teachers reported that the administration was responsible for designating the enrollees. (3) Seventy-one teachers believed that the program should be conducted through other programs. (4) The grade levels of students enrolled varied widely.

As an example, in general mechanics I, the grade level range was from eight through twelve, with many varying combinations. (5) Fifty-three teachers required shop fees and only twenty-eight teachers did not require shop fees. The shop fees required of students ranged from one dollar to five dollars. (6) Although a majority of the teachers indicated that they were qualified to teach general mechanics, forty-one teachers reported that they needed additional training in drawing and plan reading, thirty-seven teachers needed additional instruction in masonry, and thirty-two teachers needed additional instruction in small engines.

HANCHEY, KARLOS W. Factors Influencing Occupational Choices and Educational Plans of High School Students with Implications for Changes in the Role of the Secondary School. Ph.D. Dissertation, 140 p. Louisiana State University, Baton Rouge.

Purpose. The primary concern of this study was to determine the educational and occupational aspirations and expectations of high school students from two Louisiana Parishes. The objectives of this investigation were the following:

1. To determine the educational and occupational aspirations of the students.
2. To determine the educational and occupational expectations of the students
3. To determine the approximate number of students planning to enter the work world after leaving high school.
4. To determine the approximate number of students planning to enter college.
5. To identify persons who influence student vocational choices.
6. To establish the relationship of selected factors to the vocational choices of high school youth such as (a) parents, (b) friends, (c) teachers, (d) vocational limitations and (e) school environment.

Method. The Descriptive Survey Method, with the Group Interview Technique, was used in this study. Data were obtained through the mass administration of a multiple choice interview schedule to a selected sample of 1,054 high school students enrolled in grades nine through twelve in selected schools in Calcasieu and Beauregard Parish. There were 508 male students and 546 female students in this sample. Students in grades nine through twelve attending the six public secondary schools surveyed, participated in this study. The survey area was geographically located in Southwestern Louisiana, comprised of Beauregard and Calcasieu Parishes. Statistical procedures were number and per cent distribution, chi-square test of significance, and coefficient of contingency. A Hypothesis was applied to each test of significance, and was accepted or rejected at the 0.05 level of confidence.

Findings. Educational attainment of mothers and fathers were about equal, but the fathers generally attained a higher occupational status. Fathers exerted more influence on occupational choices but mothers were more influential on student educational decisions.

There was a degree of relationship between student occupational aspirations and expectations even though significant differences existed. Approximately 53 per cent of the males and 42 per cent of the females aspired to be professional workers, whereas only 27 per cent and 26 per cent, respectively, actually expected to achieve this level.

Persons influencing vocational choices were ranked as follows: mothers, friends, fathers, persons in the occupation, others, other relatives, and teachers.

The primary sources of financial aid for continued education and occupational entry were parents and work.

Primary reasons why students made their occupational choices were: interest in the work, working conditions, wages, and society contributions. High school academic achievement records were significantly related to student vocational choice levels.

A high degree of relationship existed between student educational aspirations and expectations as approximately two-thirds of the students desired and expected to attain some education beyond the high school level.

Persons closely associated with youth influenced their educational plans. They were listed in rank order as follows: mothers, fathers, friends, other relatives, persons in the occupation and teachers. Counselors exerted no significant influence on students' educational plans.

The subjects considered most influential in student vocational choices were English, health and physical education, mathematics, science and civics.

Teacher encouragement along with high school academic achievement records significantly influenced student educational aspirations and expectations.

Reasons given by respondents for possible failure to attain their educational goals were: change of interest, lack of finance, marriage plans, lack of ability and lack of encouragement.

HARRINGTON, JACKIE T. Factors Related to Vocational Choices of Agricultural Education Students. Ph.D. Dissertation. 133 p. Louisiana State University, Baton Rouge.

Purpose. The primary concern of this study was to identify some of the factors that might have influenced college students in Arkansas enrolled in agricultural education to choose a curriculum leading to the position of vocational agriculture teacher at the secondary school level. The objectives of this study were to identify the following: (1) Some factors which might influence college students in arriving at an occupational choice. (2) Individuals who influence students in their occupational choice. (3) Time when college students made their occupational choices. (4) The status of occupational expectations of college students.

Method. The Descriptive Survey Method, with the Questionnaire Technique, was the method of research used. Data were collected through the administration of a multiple choice interview schedule to a group of 135 college students, during the fall semester, 1968.

The statistical procedures involved were frequency and percentage distributions, the chi-square test of significance, and the contingency coefficient. The contingency coefficient values were computed from the chi-square value.

Findings. The high school vocational agriculture teacher had the greatest influence on the students' vocational choices. Father and mother ranked second and third, respectively, as the most influential person on vocational choices.

The primary sources of financial assistance to continue education were the students themselves and their parents.

Approximately 50 per cent of the students desired some education beyond the baccalaureate degree.

Over three-fifths of the students had lived on a farm all of their lives.

Approximately 44 per cent of the students made their vocational choice after entering college.

Participation in extracurricula activities influenced the vocational plans.

Self-satisfaction was the primary reason for making their vocational choices.

Almost 57 per cent of the students were enrolled in a vocational agriculture class for four years in high school.

Eighty-six per cent of the students had attended only one high school.

More than 50 per cent indicated a strong desire to enter the teaching field in vocational agriculture upon graduation from college.

HENDRICK, FRANKLIN DELANO, JR. Developing the Option in Food Technology With Emphasis On Meat Processing. Virginia State College, Petersburg.

Purpose. To develop a course outline in Food Technology for use by teachers of vocational agriculture who elect to teach the option in Meat Processing.

Method. Since the State Department had adopted the option in food processing, justification of the need for a study in this particular area did not have to be established. Hence, attention was given to a determination of each participating individual and agency. In addition, pertinent information was sought out and utilized in the setting up of a suggested course outline which would be executed in both classroom and experience center.

Findings. A brief summary of the findings revealed the following: (1) The persons involved in planning and establishing should include the school administrator, the teacher-coordinator, the student, the advisory committee, the parents, and the supervising employer. (2) The role of each participant must be effectively ascertained. (3) At least two years of training should be provided, preferably during the junior and senior years. (4) Minimum equipment in the laboratory of the school should include a bandsaw, small freezer, work benches, scales and selected hand tools. (5) Careful continuous evaluation of each enrollee must be in evidence. (6) In-service training of teachers represents the best method for assuring properly trained instructors. (7) A special need exists for the organization and operation of a functioning advisory committee.

JOHNSON, JOHNNY MELVIN. Requirements for Entry Workers in the Occupation of Producing and Marketing Ornamental Nursery and Greenhouse Specialties. Ph.D Dissertation, 1969. Texas A & M University. 180 p. Texas A & M University Library, College Station.

Purpose. The purpose of this research was to identify the types of competences needed by entry workers in the horticultural industry and to determine opportunities within the industry for those considering a career within it.

Method. Data were obtained by personal interviews with 30 nurserymen classified as general line growers. Interview schedules were used that contained items concerning both competence and work environment items.

Findings. Competence groups were ranked according to the levels of importance which had been assigned to them by nurserymen. From highest degree of importance to lowest, they are:

1. Identifying Ornamental Plants
2. Work Relations
3. Nursery Crop Production
4. Controlling Plant Insects and Diseases
5. Merchandising Horticultural Plants and Supplies
6. Plant Growing Media
7. Constructing, Maintaining, and Using Plant Growing Structures
8. Propagating Horticultural Plants
9. Arboriculture
10. Operating, Repairing, and Maintaining Small Power and Other Tools and Equipment
11. Establishing and Caring for Lawns and Turfs
12. Floral Crop Production
13. Water Systems and Plumbing
14. Developing the Landscape Design or Plan
15. Small Building Construction
16. Electricity
17. Floral Design

It was learned that significant differences at the .01 level existed between the mean degrees of importance that nurserymen assigned to all competence groups except 3, 10, 13, and 15 among the geographic locations studied. In other words, the degree of importance assigned to all but four of the competence groups depended upon the geographic location of the nurserymen who supplied the data. It was also learned that the variable of business size affected the degree of importance assigned to groups 1, 5, 6, 7, 8, 12, 13, 15, and 17.

Length of workweek did not vary as much from small businesses to large businesses as it did from one geographic location to another. Usually businesses in the larger metropolitan areas required workers to spend more hours per week on the job. Also, the nurseries from the metropolitan area paid higher hourly wages to beginning workers.

All beginning workers are expected to enter at the fieldman, greenhouse worker or general worker level. Wages for workers at these levels are near those required by minimum wage laws. Those persons choosing an occupational field in horticulture must be prepared to work long hours at low wages for a considerable length of time before they can hope to obtain managerial positions.

LONG, VERNON R. The Occupational Status and Educational Needs of Agricultural Engineering and Dairy and Food Industry Graduates of Texas Technological College. Thesis M.S., 1969. Texas Tech University. 171 p. Library, Texas Tech University, Lubbock.

Purpose. The purposes of this study were to determine the occupational status of graduates from the Department of Agricultural Engineering and the Department of Dairy and Food Industry, to obtain information which could be used in student counseling, and to evaluate courses the alumni completed during college.

Method. The data for this study were secured from a follow-up questionnaire and the scholastic record of each of the graduates during a period extending from January, 1958 to January, 1969. The seventy-seven agricultural engineering graduates who cooperated in this study represented 77.7 per cent of the total number of graduates. Eighty-three and three-tenths per cent of the dairy and food industry graduates returned useable questionnaires.

Findings. The occupation of the seventy-seven agricultural engineering graduates at the time of this study were as follows: engineering related, 54 per cent; agricultural related, 16 per cent; farmer or rancher, 12 per cent; non-agricultural, 5 per cent; and graduate students or military personnel, 13 per cent.

Thirty-seven graduates indicated a need for a non-credit college course for additional educational training. Twenty-four of these graduates expressed a need for business administration courses.

For possible future course additions the Agricultural Engineering staff should consider the following course areas as the graduates placed a high evaluation on these courses: pollution and waste control, business management, computer programming, engineering physics, environmental engineering, engineering law and ethics and economic principles.

Of the fifty dairy and food industry graduates, fifty-eight per cent had occupations related to the dairy and food industry, 8 per cent were in other agricultural occupations, 14 per cent were in nonagricultural occupations, 8 per cent in the military service, and 12 per cent were graduate students at the time of this study.

The graduates rated agronomy, horticulture, freshman orientation, and history courses rather low, whereas mathematics, English, speech, chemistry, accounting, and microbiology were rated high.

MASON, CLARENCE. A Comparison of College Performance of Students With and Without Vocational Agriculture, at Louisiana State University, 1955-1965. M.S. Thesis. 1969. Louisiana State University, Baton Rouge.

Purpose. The purpose of this study was to obtain and to interpret data which may be useful in comparing the college performance of the students having had vocational agriculture and those who have not. This information may be useful to vocational agriculture teachers, guidance counselors and school administrators.

Method. The names of the students included in this study were obtained from the Louisiana State University student directory using towns from Vocational Agricultural Supervisory Area IV as a guide for student selection. All students from towns located in Vocational Agricultural Supervisory Area IV who attended Louisiana State University during the period 1955-1965 were listed and files pulled in the registrar's office to find those students with four years of vocational agriculture and those without this experience.

These names were then placed into their respective groups according to whether they had four years of vocational agriculture or no vocational agriculture. A random sample of one hundred and twenty five students from each group was taken.

Findings. Data reveal that vocational agriculture students performed as well as the non-vocational students in the seven colleges of the University.

Data indicated that 86.4 per cent of the vocational agriculture students and 67.2 per cent of the non-vocational students did not change their college majors. The number of times that students changed their college majors was highly significant at the .01 level in favor of the vocational agriculture group.

A high percentage of the vocational agriculture group and the non-vocational group were suspended, dismissed, transferred, or did not return to the University. Sixty-one and six-tenths per cent of the vocational agriculture group and 45.6 per cent of the non-vocational group fell into this category.

Data also reveal that students with three units in English, two units in mathematics and two units in social studies perform just as well as students with more units in these subject matter areas. However, students with more than two units in science were inclined to make better grades in sequent courses than were the students with two units. Data also indicate that the high school curriculum studied had an influence on curriculum selection in college.

OTTE, ELROY. Factors Affecting the Educational and Career Choices of Agricultural Education Graduates at Texas A & M University, 1960-1964. Ph.D. Dissertation, 1969. Texas A & M University. 170 p. Texas A & M University Library, College Station.

Purpose. The purposes of the research were (1) to determine factors that influenced graduates to select agricultural education as a major at Texas A & M University, (2) to determine occupational status of graduates, (3) to determine the perception of curricular experiences of graduates in retrospect.

Method. Data were obtained from records on the campus and from a questionnaire sent to 208 graduates. Usable responses were received from 75 per cent.

Findings. Academic standards and curricular offerings were the primary factors that influenced the graduates to select Texas A & M University, while teachers of vocational agriculture and friends were the most influential persons.

Teachers of vocational agriculture were given credit by more than 50 per cent of the graduates for influencing them to select agricultural education as a major. The selection of the major was made by 55.6 per cent before entering college; an additional 44.4 per cent made the decision after entering college but before the junior year.

The largest group of graduates--27.6 per cent--became teachers of vocational agriculture upon graduation followed by teachers of subjects other than vocational agriculture. The third largest number entered an occupation in governmental service. At the time of the study, 60.5 per cent of those that became teachers of vocational agriculture upon graduation were still teaching the subject. Due to migration into the profession, however, 24 per cent of all graduates were teaching vocational agriculture when the study was made.

Graduates with grade point ratios of 2.00 to 2.49 (three point system) were earning the highest salaries at the time of the study. The lowest salaries were being earned by graduates with the lowest grade point ratios. Former students with military service earned a median salary of \$10,178 compared to \$8,294 for those without military service.

Business management was the area that the greatest number of graduates thought should be added to the curriculum. Agricultural economics was the area that the most respondents thought should be increased. These recommendations were related to the occupation in which graduates were engaged at the time of the study.

REED, DALE F. Professional Problems Encountered by Vocational Agriculture Teachers in Louisiana and Implications for Teacher Preparation, Adjustment and Retention. Ph.D. Dissertation, 1969. Louisiana State University. 205 p., Baton Rouge.

Purpose. The primary purpose of this study was to determine the professional problems encountered by beginning vocational agriculture teachers in Louisiana and the implications these have for the improvement of teacher training, placement, follow-up services and the retention of these teachers.

Method. The Descriptive Survey Method using the Questionnaire Technique was the method of research used in this study. Questionnaires were mailed to thirty-five beginning teachers, their principals and twenty selected experienced teachers.

The instrument consisted of two schedules. The first was composed of nine problem areas and eighty problems which covered the total program of vocational agriculture and was completed by the three groups in the survey. Significance of the difference between means, utilizing the student's difference of means test; rank order correlations and linear correlations were used in contrasting beginning and experienced teacher and beginning teacher and administrator ratings. The second schedule was sent to the beginning teachers and consisted of three sections which were utilized in evaluating their teacher preparation programs in terms of the problems encountered in teaching. Their problems encountered in Schedule I were contrasted and correlated with the responses to the three sections of their teacher preparation program, Schedule II.

Findings. Problems encountered by beginning teachers are not identical to those encountered by experienced teachers and the administrators and supervisors recognized the problems of the beginning teachers.

Beginning teachers were having significantly greater difficulty than the experienced teachers in the areas of Classroom Teaching, Teaching Farm Mechanics, Advising the FFA, Young and Adult Farmer Programs and Public Relations.

The beginning and experienced teachers agreed that they were having a high degree of difficulty with the areas of Young and Adult Farmer Programs and Developing Supervised Agriculture Experience Programs.

The three groups surveyed agreed that the areas of greatest difficulty were Teaching Farm Mechanics, Guidance and Counseling, Developing Agriculture Experience Programs and Adult and Young Farmer Programs.

There were no linear relationships between the ratings of beginning and experienced teachers and beginning teachers and their administrators for the nine problem areas.

Significant differences were found between the problems encountered in teaching and the teacher preparation programs in the areas of Relationships with School and Administration, Teaching Farm Mechanics and Young and Adult Farmer Programs. Little linear relationships were found between the problems encountered in teaching and the teacher preparation programs.

STEWART, ALFRED. The Emerging Role of the Teacher of Vocational Agriculture. Ph.D. Dissertation, 1969. Louisiana State University, 218 p. Louisiana State University, Baton Rouge.

Purpose. This study was an attempt to determine the role of the vocational agriculture teacher as conceived by five professional education groups: agriculture teachers, teacher educators, parish superintendents, parish supervisors, and state staffs.

A knowledge of the role concepts held for the teacher by those who are responsible for his training, supervising his activities, and administering educational programs, enhances his possibilities for performing in an acceptable manner. Not only is it important for the teacher to know what others conceive, but he too, must hold a strong, clear philosophy of the role which a teacher of vocational agriculture should assume if he is to perform with a high degree of efficiency and effectiveness. This is supported by a Scripture of the Bible, which states: "As he thinketh deep down in his heart, so is he." This bit of wisdom is accepted by the writer, who insists that it is hardly possible for an individual to operate on a higher plane than that of his thoughts and concepts.

It was hoped that this study would point out many areas in which the vocational agriculture teacher may and must find himself involved if his program is to be a success.

Method. The Descriptive Survey Method with the Questionnaire technique was used in this study. Questionnaires containing 12 role items and 78 activities were mailed to 75 teachers, 31 teacher educators, 13 parish superintendents, 15 parish supervisors of instruction, and 16 state staff members. All participants were males except four--three supervisors of instruction, and one former guidance counselor.

Basically, data for this study were collected from the five states in Region VII--Arkansas, Louisiana, New Mexico, Oklahoma, and Texas, however, teacher educators from eleven other states were asked to respond to the questionnaire thus involving individuals with strong concepts and many years of experience in research along with the practitioner. It was believed that such individuals are in a favorable position to make evaluations as to what the role of the teacher of vocational agriculture really is.

The instruments were first submitted to a group of 15 persons as a test for clarity, validity, and pertinency of items. All jury members responded.

The mean responses of the five groups were calculated to obtain a rating for each item from each professional group. As a test of significant differences among these groups, the analysis of variance procedure was used. Where differences were found, the teachers were compared with the other four groups and the teacher educators were compared with the remaining three groups--teachers excluded-- to see if they held different views from their counterparts. The F-test was applied and determining the degree of differences existing. Finally, the null hypothesis was set up as the basis against which each test was to be made and was accepted or rejected at the .05 level of confidence.

Findings. Significant differences existed among the responses to 26 of the 78 role activities at the .05 level of confidence. When these 26 activities were used in two comparisons, the teachers differed with their counterparts with respect to 15 activities while the teacher educators differed with their counterparts with respect to 15 activities while the teacher educators differed with the remaining three groups in their responses to 10 of these role activities.

None of the items were rated Extremely Important by an average of all responses.

Nine items--High School Instruction; FFA and Leadership; Work Experience; Orientation, Placement, and Follow-Up; Summer Programs; Educational Resources; Program Organization; In-Service Education; and Evaluation--were Very Important according to the average of all responses. Other items evaluated as being Important were--Post High School Instruction and Recruitment and Selection. Slightly Important was assigned to Extra class Activities, and neither item was considered inappropriate.

WEBB, EARL S. Opportunities and Requirements for Entry Into the Agricultural Machinery Mechanics Trade. Staff Study, 1969. Texas A & M University. 106 p. Department of Agricultural Education, College Station.

Purpose. The Purposes of the research were (1) to determine the content that should be included in courses of study designed to prepare persons to enter the farm machinery trade and (2) to obtain information about the occupation that would be useful to persons considering the trade as an occupational goal.

Method. Data were obtained from owners and shop service managers by personal interview. Interviews were made by teachers of vocational agriculture after being instructed by the investigator.

Findings. A critical shortage of farm machinery service and repair mechanics exists. The shortage is due to a lack of training programs, piracy by auto and heavy equipment businesses, complexity of modern machinery, low wages, and a lack of information about opportunities in the occupation.

Desire and aptitude were believed to be the most important factors for success in the mechanics trade. Proper attitude toward management, fellow workers, and customers; pride in workmanship; respect for tools; cleanliness of work area and of person were also considered to be major success factors.

Safety was found to be the most important knowledge a mechanic should possess. Second in importance was the ability to use tools. Special emphasis was placed upon the ability to read and interpret operators' manuals and technical bulletins.

Beginning mechanics should have a balance between a functional understanding of mechanical units and the ability to service and repair units. Training programs should begin with the engine and ignition system; then as time permits, programs should include, in the following order, lubrication and fuel systems, electrical systems and instruments, power train and hydraulics. Specialization should follow the development of a high level of competence as a general mechanic.